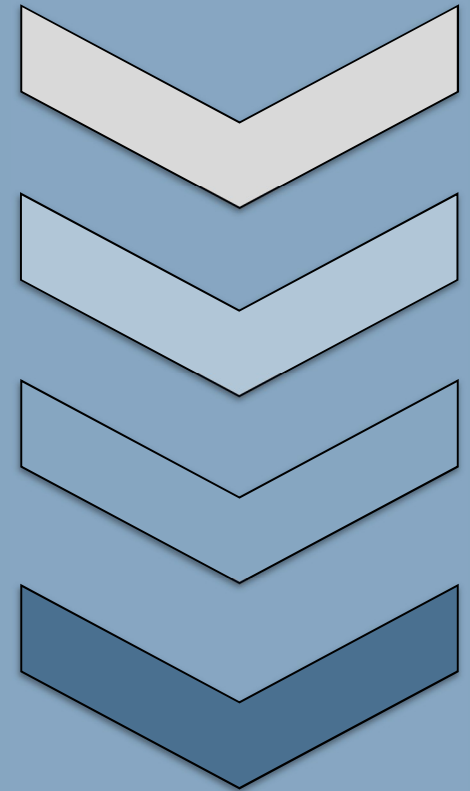


# THE MISSISSIPPI OPIOID AND HEROIN DATA COLLABORATIVE



## **Provisional Data Report First Quarter of 2019**

**Mississippi Board of Pharmacy**

**Mississippi Bureau of Narcotics**

**Mississippi State Department of Health**

**Mississippi Department of Mental Health**

**The University of Southern Mississippi**

**7/3/2019**

## DATA AND REPORT OVERVIEW

- This report summarizes data on opioid prescriptions dispensed in Mississippi, fatal drug overdoses reported to the Mississippi Bureau of Narcotics, naloxone administration by Emergency Medical Services for suspected overdoses, drug-related arrests, and treatment for opioid-related disorders within facilities certified by the Mississippi Department of Mental Health.
- The goal of this report is to provide the public and policy makers with timely information on key indicators measuring the scope of the opioid epidemic in Mississippi.
- Most of the statistics presented in this report are based on available data. The report is updated quarterly. We strive to present the latest data in a quarterly format, but some of the data sources used in this report are only released on an annual basis. Detailed information regarding each of the data sources used in the report is presented in the technical notes on page 12.

Opioid  
prescriptions

Overdose deaths

Treatments for  
opioid-related  
disorders

Naloxone  
administrations

Drug-related arrests

### ACKNOWLEDGMENTS

This report is the product of a collaborative effort by the following state agencies: Mississippi State Department of Health, Mississippi Department of Mental Health, Mississippi Bureau of Narcotics, Mississippi Board of Pharmacy, and The University of Southern Mississippi's School of Social Work. The original formatting for these reports was developed by Manuela Staneva, MPH, Epidemiologist, Mississippi State Department of Health.

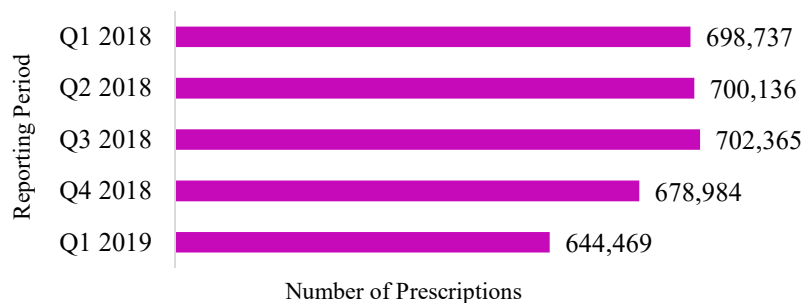
This project was supported by Grant No. 2017-PM-BX-K036 awarded by the Bureau of Justice Assistance. The Bureau of Justice Assistance is a component of the Department of Justice's Office of Justice Programs, which also includes the Bureau of Justice Statistics, the National Institute of Justice, the Office of Juvenile Justice and Delinquency Prevention, the Office for Victims of Crime, and the SMART Office. Points of view or opinions in this document are those of the Mississippi Opioid and Heroin Data Collaborative and do not necessarily represent the official position or policies of the U.S. Department of Justice.

## OPIOID PRESCRIPTIONS AND DOSAGE UNITS DISPENSED

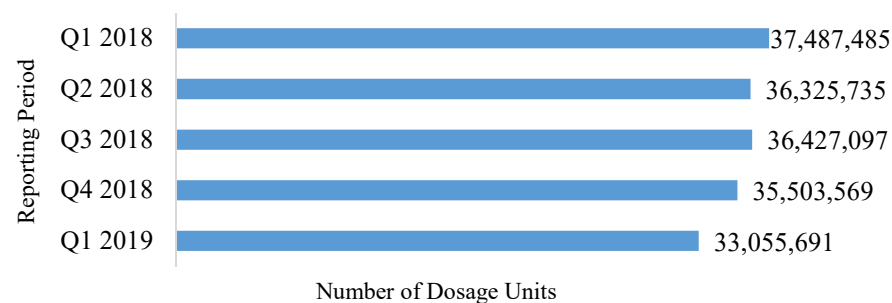
### FINDINGS

- During the first quarter of 2019, over 600,000 opioid prescriptions and 33,055,691 dosage units (e.g., pills) were dispensed in Mississippi. On average, more than 360,000 dosage units were dispensed every day during this quarter.
- Compared to the first quarter of 2018, there were 54,268 fewer opioid prescriptions dispensed during the first quarter of 2019. This was a 7.8% decrease. During the same period, the number of dosage units dispensed decreased by 11.8 % or 4,431,794 pills.

**Figure 1. Number of Opioid Prescriptions Dispensed in MS, 2018 - Q1 2019**



**Figure 2. Number of Opioid Dosage Units Dispensed in MS, 2018 - Q1 2019**



### Opioid Prescriptions, Q1 2019

- Total number: 644,469
- Average number per month: 214,823
- Average number per day: 7,160
- The rate was 21.6 opioid prescriptions per 100 persons – enough for approximately 1 in 5 people in Mississippi to have 1 opioid prescription.

### Opioid Dosage Units, Q1 2019

- Total number: 33,055,061
- Average number per month: 11,018,564
- Average number per day: 367,285
- The rate was 1,106.8 opioid dosage units per 100 persons – enough for each person in Mississippi to have a supply of 11 opioid dosage units.

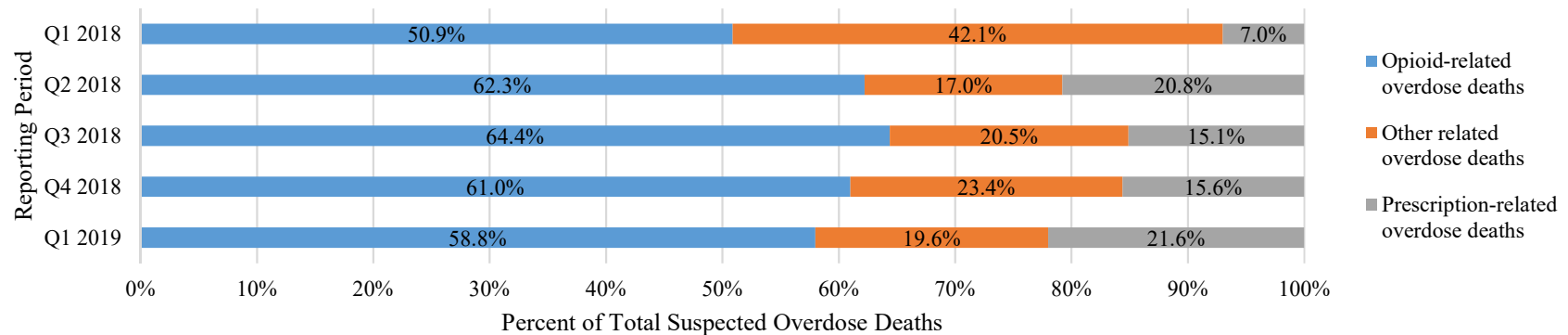
**CONSIDERATIONS:** This report identified a considerable decline in the number of opioid prescriptions from 2017. Such downward movement could be driven, in part, by statewide educational initiatives. Nonetheless, Mississippi's prescription rates remain high and warrant continuous educational outreach and preventive efforts. It should also be noted that The Mississippi State Board of Medical Licensure revised its regulations on prescribing opioids and other controlled substances in late October of 2018. Information about the new regulations can be found at The Mississippi State Board of Medical Licensure's [website](#).<sup>1</sup>

## SUSPECTED DRUG OVERDOSE DEATHS

### FINDINGS

- In the first quarter of 2019, 30 (58.8%) of the 51 suspected overdose deaths reported to the Mississippi Bureau of Narcotics (MBN) were opioid-related. The numbers of opioid-related deaths and total overdose deaths both decreased by approximately 45% from Q1 2018 to Q1 2019.

**Figure 3. Percentage of Total Suspected Overdose Deaths by Type of Involved Substance, MS. 2018 - Q1 2019**



**Table 1. Number of Suspected Overdose Deaths Reported to Mississippi Bureau of Narcotics by Type of Involved Substance, MS, Q1 2019**

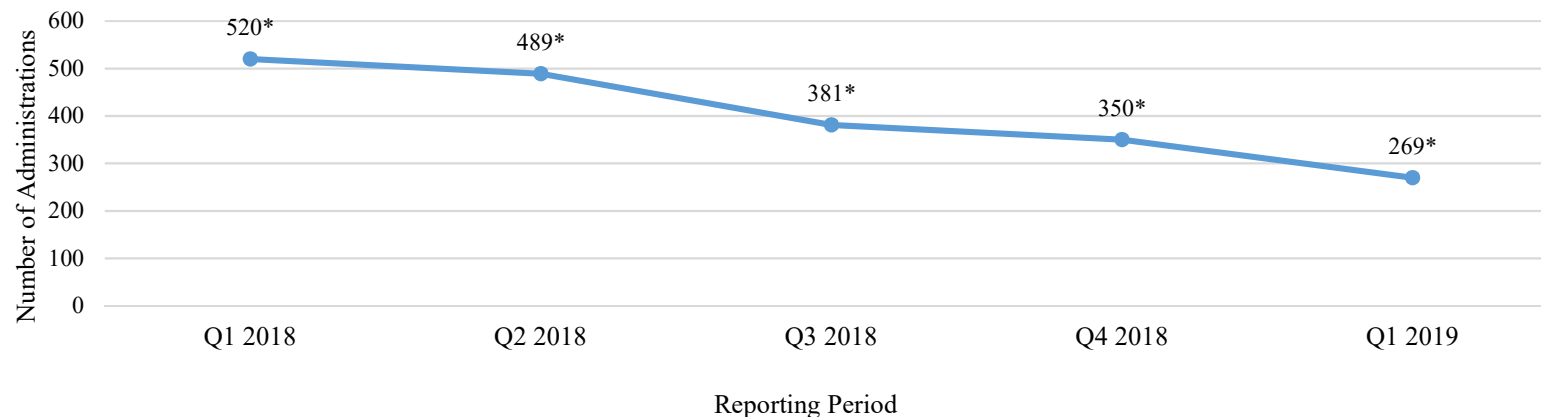
	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019
Prescription opioid related	33	23	29	26	11
Fentanyl related	3	2	8	5	3
Fentanyl and prescription related	7	7	4	8	5
Heroin related	6	3	9	6	7
Heroin and prescription related	0	3	5	6	1
Heroin and fentanyl related	5	3	7	2	3
Total opioid related overdose deaths	54	41	62	53	30
Other related overdose deaths	26	21	25	19	10
Prescription related overdose deaths	13	6	13	9	11
<b>Overall total suspected overdose deaths</b>	<b>93</b>	<b>68</b>	<b>100</b>	<b>81</b>	<b>51</b>

**CONSIDERATIONS:** The accurate assessment of drug-related fatalities depends on complete and high quality data. The reliability of mortality data, however, is impacted by several constraints such as insufficient resources, training, or time for performing thorough death investigations. In addition, Mississippi lacks a centralized system for connecting different entities involved in the compilation and reporting of mortality data. Efficient collaboration among state agencies, educational outreach for coroners, and standardized protocols for drug overdose investigation and reporting are measures that can improve drug-related mortality surveillance.<sup>2</sup> It should also be noted that the MBN does not include a death in the count until a toxicology report has been completed; therefore, currently pending cases will result in increased numbers in the future.

**NOTE:** Eighteen (18) of the 51 overall total overdose deaths also involved methamphetamines, as did 7 of the 30 total opioid-related overdose deaths.

**EMS NALOXONE ADMINISTRATION****FINDINGS**

- Emergency Medical Services (EMS) data revealed that naloxone was administered 269 times during Q1 2019, which is a 48.3% decrease compared to Q1 2018.
- On average, 90 naloxone administrations were reported in Mississippi each month during the first quarter of 2019.

**Figure 4. Naloxone Administration by EMS: Number of Cases, MS, 2018 - Q1 2019\***

\*Transition in data reporting system may lead to future updates

**CONSIDERATIONS:** The life-saving drug naloxone, an opioid antagonist, is used to reverse opioid overdose. The emergence and growing popularity of highly toxic synthetic opioid substances require the following state-level actions:

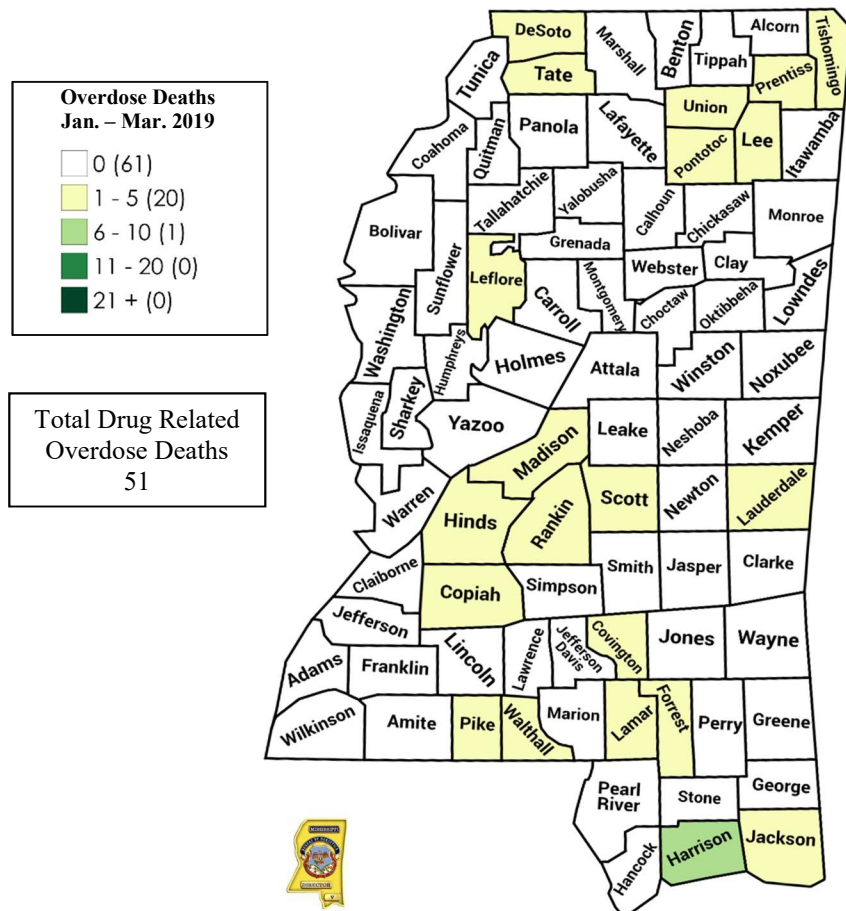
- Facilitating and expanding access to naloxone for patients with opioid use disorders.
- Providing training on naloxone administration for all first responders and all persons at risk for opioid-related overdoses as well as their families, friends, and community members.

**IMPORTANT MESSAGE:** Figure 5 documents only naloxone distributed through EMS. Additional distribution occurs through the State Targeted Responses to the Opioid Crisis (STR) grant and a standing order. In May 2018, State Health Officer of Mississippi, Dr. Mary Currier, signed a standing order that covers, without a prescription, the dispensing and administration of naloxone. The standing order was re-signed by Dr. Paul Byers, State Epidemiologist, in May 2019.

## SUSPECTED OVERDOSE DEATHS & EMS NALOXONE DISTRIBUTION BY COUNTY

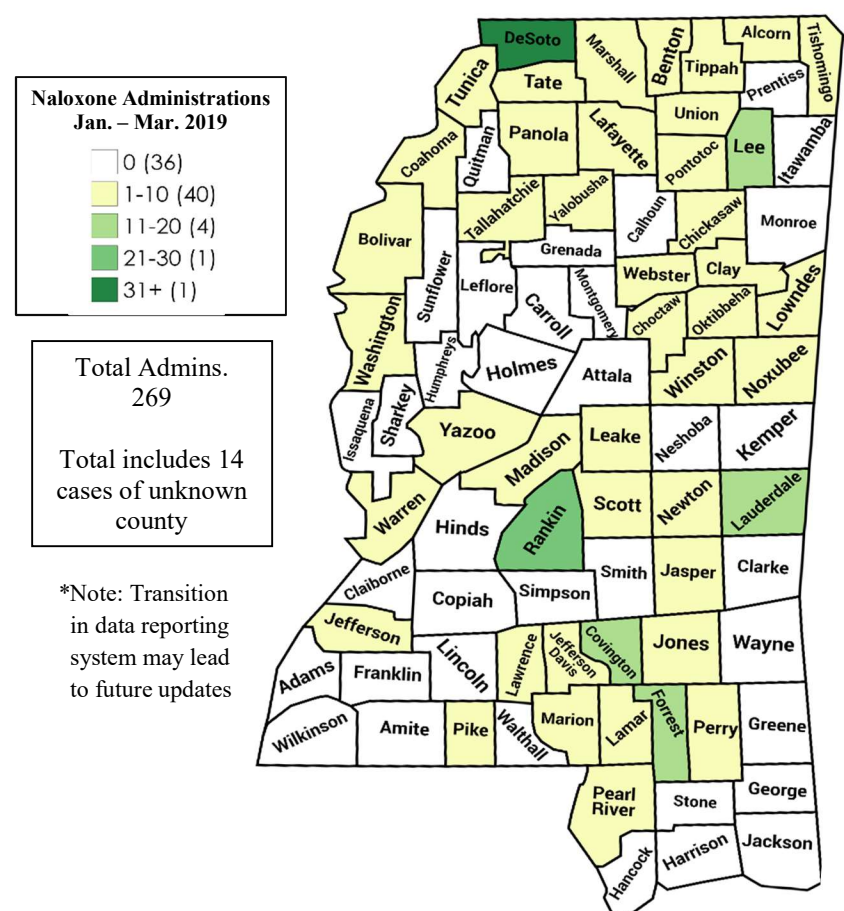
- **Suspected Overdose Deaths:** The top 3 counties, Harrison (6), DeSoto (5), and Hinds (5), accounted for 31.4% of all suspected overdose deaths in Q1 2019.
- **Naloxone Administrations:** The top 3 counties, DeSoto (34), Rankin (24), and Lauderdale (14), accounted for 26.8% of all EMS naloxone administrations in Q1 2019.

**Figure 5. Number of Suspected Overdose Deaths by County, MS, Q1 2019**



Data Source: Mississippi Bureau of Narcotics

**Figure 6. Number of EMS Naloxone Administrations by County, MS, Q1 2019\***



Data Source: Mississippi State Department of Health - EMS

## TREATMENT ADMISSIONS FOR OPIOID USE DISORDERS

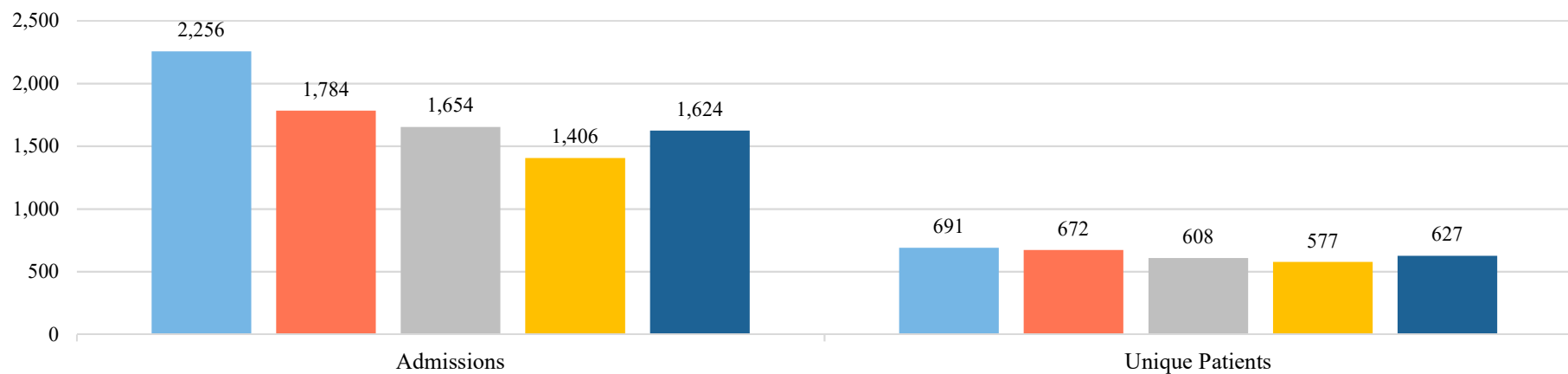
### FINDINGS

- Table 2 and Figure 7 report opioid-related admissions to facilities certified by the Department of Mental Health (DMH).
- Table 2 indicates that, on average, there were 2.59 admissions per patient during Q1 2019, a 21% decrease compared to Q1 2018.
- Opioids were listed as the primary substance for 367 (59%) of the 627 unique patients admitted in Q1 2019. This is lower than Q1 2018, in which opioids were the primary substance for 417 (60%) of the 691 patients.
- Figure 7 displays the total (primary, secondary, and tertiary) admissions and unique patients. There have been decreases both in total number of admissions and unique patients since Q1 2018.

**Table 2. Number of Admissions and Unique Patients, Department of Mental Health, MS, 2018 - Q1 2019**

	Q1 2018		Q2 2018		Q3 2018		Q4 2018		Q1 2019	
	Adm.	Pts.	Adm.	Pts.	Adm.	Pts.	Adm.	Pts.	Adm.	Pts.
Primary	1,404	417	1,075	428	1,019	376	817	360	935	367
Secondary	572	182	513	172	384	164	428	151	464	174
Tertiary	280	92	196	72	251	68	161	66	225	86
<b>Total</b>	<b>2,256</b>	<b>691</b>	<b>1,784</b>	<b>672</b>	<b>1,654</b>	<b>608</b>	<b>1,406</b>	<b>577</b>	<b>1,624</b>	<b>627</b>

**Figure 7. Substance Use Disorders:  
Number of Total Admissions and Unique Patients, MS, 2018 - Q1 2019**



**NOTE:** The number of admissions is consistently higher than the number of patients because patients can be admitted to multiple programs or relapse.



## TREATMENT ADMISSIONS FOR OPIOID USE DISORDERS: TYPE OF OPIOID

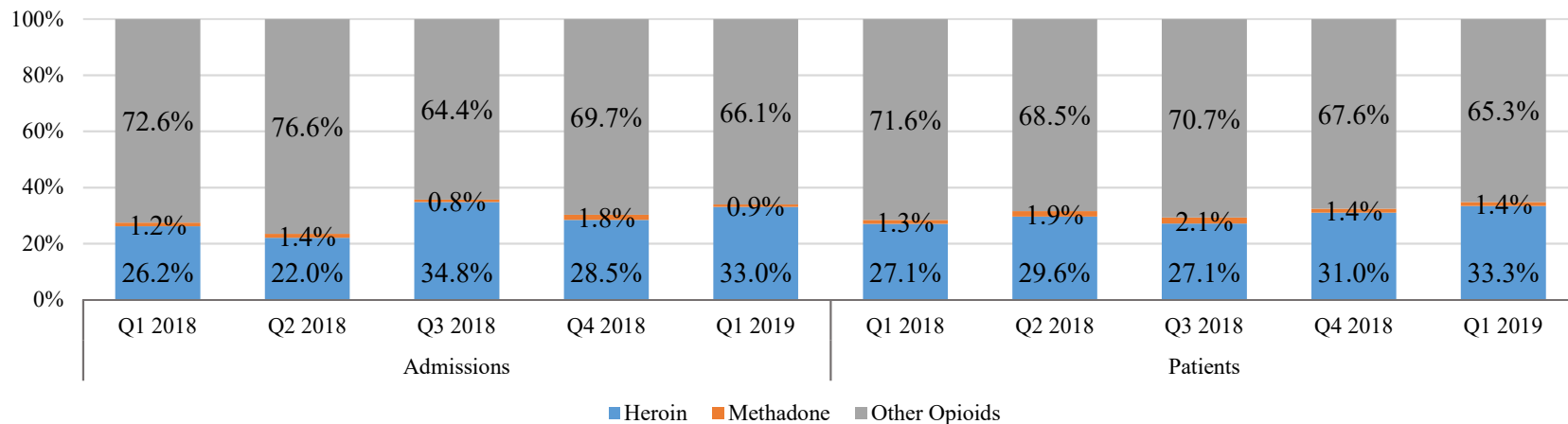
### FINDINGS

- Table 3 and Figure 8 categorize the type of opioid involved in opioid-related admissions to facilities certified by the DMH.
- The “other opioids” category includes prescription opioids and constituted 66.1% of all opioid-related admissions in Q1 2019. Heroin represented 33.0% of admissions, and methadone represented 0.9%.
- Compared to Q1 2018, the number of unique patients admitted for “other opioids” was down by 17.4% in Q1 2019, but the number admitted for heroin increased by 11.8%.

**Table 3. Number of Admissions and Unique Patients by Type of Opioid, MS, 2018 – Q1 2019**

	Q1 2018		Q2 2018		Q3 2018		Q4 2018		Q1 2019	
	Adm.	Pts.	Adm.	Pts.	Adm.	Pts.	Adm.	Pts.	Adm.	Pts.
Heroin	591	187	393	199	576	165	400	179	536	209
Methadone	28	9	25	13	13	13	26	8	15	9
Other Opioids	1,637	495	1,366	460	1,065	430	980	390	1,073	409
<b>Total</b>	<b>2,256</b>	<b>691</b>	<b>1,784</b>	<b>672</b>	<b>1,654</b>	<b>608</b>	<b>1,406</b>	<b>577</b>	<b>1,624</b>	<b>627</b>

**Figure 8. Treatment Admissions and Unique Patients by Type of Opioid: MS, 2018 - Q1 2019**



**CONSIDERATIONS:** The Substance Abuse and Mental Health Services Administration (SAMHSA) estimates that 121,000 Mississippians are in need of substance use disorder treatment services.<sup>3</sup> Currently, Mississippi does not have the capacity to provide treatment for all the patients in need.



## DRUG-RELATED CRIME DATA

### FINDINGS

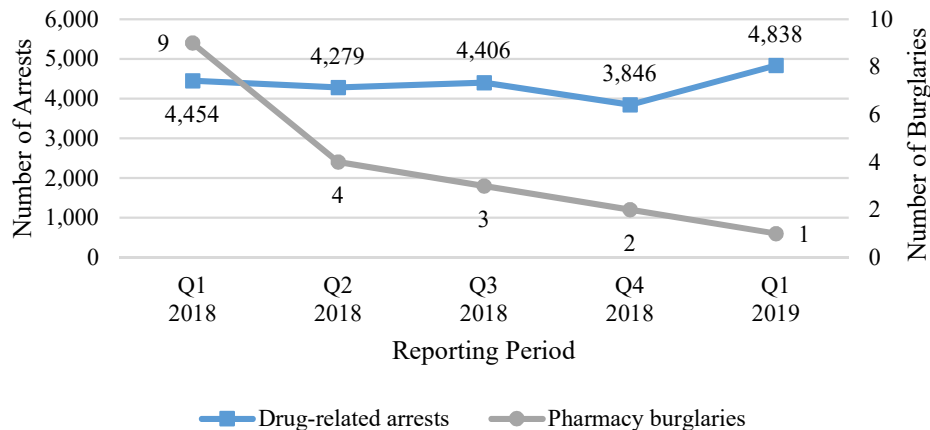
#### Drug-Related Arrests:

- The total number of drug-related arrests reported in Q1 2019 was 4,838, which is 8.6% more than in Q1 2018.
- On average, 1,612 drug-related arrests were reported in Mississippi each month during Q1 2019.
- During Q1 2019, the greatest numbers of drug-related arrests were reported in DeSoto (556), Hinds (554), and Rankin (486) counties.

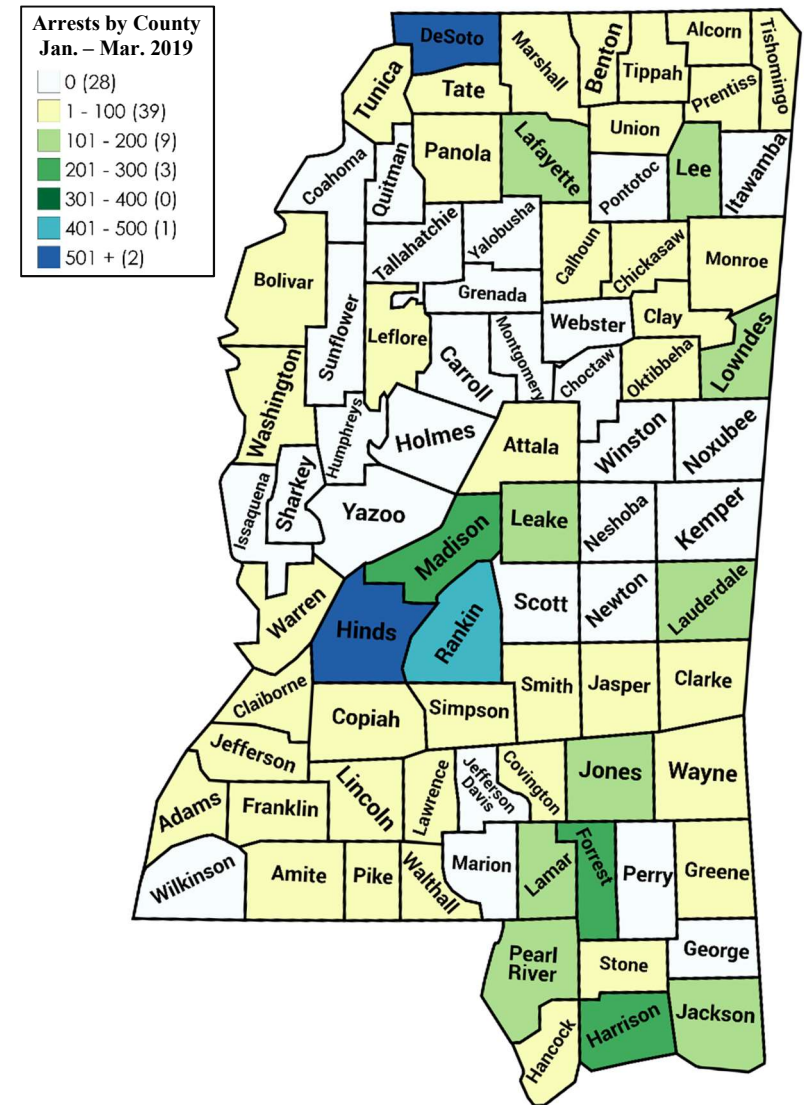
#### Pharmacy Burglaries:

- During Q1 2019, there was 1 completed pharmacy burglary and 2 attempted burglaries.
- There were 8 fewer completed pharmacy burglaries in Q1 2019 compared to Q1 2018, representing an 88.9% decrease.

**Figure 10. Drug-Related Arrests and Pharmacy Burglaries by Quarter: MS, 2018 - Q1 2019**



**Figure 9. Number of Drug-Related Arrests by County, MS, Q1 2019**

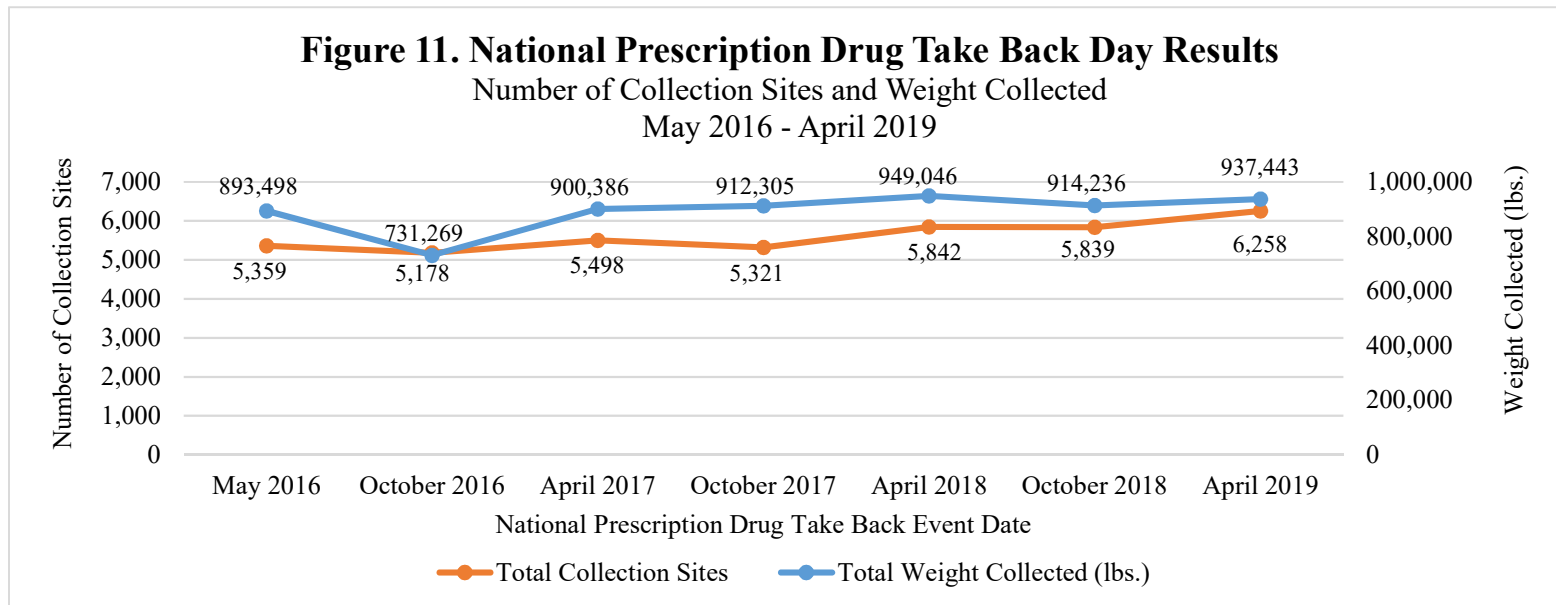


Data Source: Mississippi Bureau of Narcotics

## DRUG TAKE-BACK

### UPCOMING DRUG TAKE-BACK DAY: OCTOBER 26, 2019

- The Drug Enforcement Administration (DEA) holds a National Prescription Drug Take-Back Day each year in April and October in order to collect unused prescription medications.
- In April 2019, a total of 937,443 pounds of drugs were collected across the United States.<sup>4</sup> During the same event, 3,753 pounds were collected in Mississippi.



- The Collection Site Locator on the DEA's website can be used to find public collection sites between Take Back Days.<sup>5</sup>
- Prescription drop boxes are also available year-round at law enforcement locations in the following areas in Mississippi:<sup>6</sup>

Bay St. Louis	Byram	Gulfport	Louisville	Moss Point	Oxford	Ridgeland	Waveland
Biloxi	Columbus	Kemper Co.	McComb	Natchez	Pascagoula	Smith Co.	
Brandon	D'Iberville	Long Beach	Woolmarket	Ocean Springs	Pass Christian	Vicksburg	

## COUNTY-LEVEL DATA: Q1 2019

**Table 4. Number of Suspected Overdose Deaths, EMS Naloxone Administrations, Drug-Related Arrests, and Opioids Dispensed by County, MS, Q1 2019**

County	Number of Suspected Overdose Deaths	Number of EMS Naloxone Administrations*	Number of Reported Drug-Related Arrests	County	Number of Suspected Overdose Deaths	Number of EMS Naloxone Administrations*	Number of Reported Drug-Related Arrests
Adams	0	0	83	Leflore	1	0	5
Alcorn	0	1	78	Lincoln	0	0	31
Amite	0	0	5	Lowndes	0	9	190
Attala	0	0	5	Madison	1	9	266
Benton	0	3	3	Marion	0	7	0
Bolivar	0	8	3	Marshall	0	6	42
Calhoun	0	0	15	Monroe	0	0	7
Carroll	0	0	0	Montgomery	0	0	0
Chickasaw	0	4	31	Neshoba	0	0	0
Choctaw	0	1	0	Newton	0	1	0
Claiborne	0	0	15	Noxubee	0	1	0
Clarke	0	0	4	Oktibbeha	0	3	44
Clay	0	4	24	Panola	0	1	68
Coahoma	0	4	0	Pearl River	0	9	197
Copiah	1	0	32	Perry	0	1	0
Covington	2	11	6	Pike	1	6	66
DeSoto	5	34	556	Pontotoc	1	1	0
Forrest	1	12	289	Prentiss	2	0	5
Franklin	0	0	1	Quitman	0	0	0
George	0	0	0	Rankin	4	24	486
Greene	0	0	4	Scott	1	4	0
Grenada	0	0	0	Sharkey	0	0	0
Hancock	0	0	72	Simpson	0	0	28
Harrison	6	0	266	Smith	0	0	13
Hinds	5	0	554	Stone	0	0	46
Holmes	0	0	0	Sunflower	0	0	0
Humphreys	0	0	0	Tallahatchie	0	2	0
Issaquena	0	0	0	Tate	1	7	64
Itawamba	0	0	0	Tippah	0	3	1
Jackson	4	0	145	Tishomingo	4	2	90
Jasper	0	1	51	Tunica	0	5	10
Jefferson	0	2	13	Union	3	1	40
Jefferson Davis	0	3	0	Walthall	2	0	16
Jones	0	9	114	Warren	0	5	55
Kemper	0	0	0	Washington	0	6	22
Lafayette	0	2	125	Wayne	0	0	52
Lamar	1	1	120	Webster	0	1	0
Lauderdale	1	14	131	Wilkinson	0	0	0
Lawrence	0	2	14	Winston	0	5	0
Leake	0	3	118	Yalobusha	0	1	0
Lee	4	13	117	Yazoo	0	3	0

Note: The zero values in this table may signify either that cases of overdose deaths, naloxone administrations, and drug-related crimes have not occurred or that such cases did occur but were not reported by the relevant authorities.

\*Transition in data reporting system may lead to future updates.

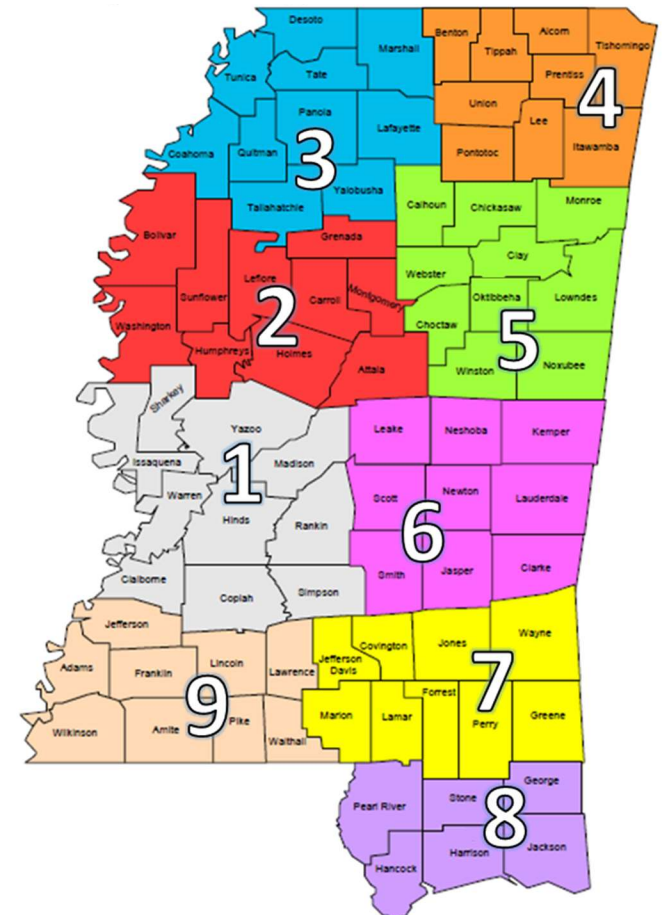
## MISSISSIPPI BUREAU OF NARCOTICS DISTRICTS

- Figure 12 displays the 9 districts used by the Mississippi Bureau of Narcotics (MBN).
- Table 5 shows the 5 districts with the highest rates of suspected overdose deaths, EMS naloxone administrations, and drug-related arrests in Q1 2019.

**Table 5. Rank of MBN Districts: Rates of Suspected Overdose Deaths, EMS Naloxone Administrations, Drug-Related Arrests, Q1 2019**

Suspected Overdose Deaths per 10,000 Persons by MBN District, MS, Q1 2019		
Rank	MBN District	Suspected Overdose Deaths per 10,000 Persons
1	4	.50
2	8	.20
3	9	.18
4	1	.17
5	3	.15
EMS Naloxone Administrations per 10,000 Persons by MBN District, MS, Q1 2019*		
Rank	MBN District	Administrations per 10,000 Persons
1	3	1.56
2	7	1.44
3	5	1.15
4	6	.97
5	4	.85
*Transition in data reporting system may lead to future updates.		
Drug-Related Arrests per 10,000 Persons by MBN District, MS, Q1 2019		
Rank	MBN District	Drug-Related Arrests per 10,000 Persons
1	1	22.43
2	3	21.72
3	7	19.11
4	8	14.76
5	9	13.61

**Figure 12. Mississippi Bureau of Narcotics Districts**



Source: Mississippi Bureau of Narcotics

## TECHNICAL NOTES

### DATA SOURCES

**Prescription Monitoring Program (PMP):** The PMP is a statewide electronic database designed to collect information on the dispensing of controlled substances. These data are used to inform the public about current trends in prescription drug use and assist medical professionals in making informed clinical decisions while preventing the illegitimate use of controlled substances. PMP data are collected by the Mississippi Board of Pharmacy. The findings presented in this report include prescriptions for opioid analgesics and opioid-containing cough medications.

**Drug-Related Mortality Data:** The Mississippi Bureau of Narcotics collects data on overdose deaths from reports filed by coroners. Deaths are reported for the quarter the coroner's report was received, regardless of when the death occurred. Additionally, not all coroners may report data on overdose deaths. Therefore, the reported data on overdose death counts may be incomplete, thereby creating a possible undercount.

**Mississippi Emergency Medical Services Data:** The Mississippi State Department of Health collects state-level data and maintains a cutting-edge database on all episodes of emergency medical care delivered by Emergency Medical Services (EMS). The data set contains structured data elements such as incident date and county, patient demographics, main patient complaint, and medications administered. It should be noted that transition in data reporting system may lead to future updates of these data.

**Treatment Admissions for Opioid Use Disorder:** Data include admissions reported by substance use disorder treatment providers that are certified by the Mississippi Department of Mental Health (DMH). Data represent outpatient and inpatient services, including medication-assisted treatment, reported to DMH's Central Data Repository (CDR). Treatments within non-DMH certified facilities and general hospital admissions for substance use disorders are not a part of this report.

**Drug-Related Crime Data:** The arrest data reflect all drug-related offenses including the manufacture, sales, and possession of any controlled substance. These data may not be complete because of underreporting by local police offices. Additionally, crime statistics are influenced by the scope of law enforcement activities. An increased level of law enforcement, for example, may lead to increased arrest rates for particular offenses.

**Population Estimates for Mississippi:** Rates were calculated using the 2017/2018 Mississippi population estimates released by the U.S. Census Bureau. Accessed on 2/21/2019 at: [https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=PEP\\_2017\\_PEPANNRES&src=pt](https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=PEP_2017_PEPANNRES&src=pt)

**Historical Data:** An appendix of previous years' data can be found at the Mississippi State Department of Health website: <https://msdh.ms.gov/msdhsite/static/44,0,382,740.html>

### References:

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**THE PROJECT: DESCRIPTION AND GOALS****THE MISSISSIPPI OPIOID AND HEROIN DATA COLLABORATIVE (MS-OHDC)**

Five state agencies have united to transform one of the formidable drug-related challenges Mississippi has ever faced into an opportunity for developing data-driven policy changes aimed at combating the current opioid epidemic and preventing future drug-related crises.

**GOALS**

Improve Data  
Collection and Data  
Sharing

Perform  
Epidemiological  
Research

Disseminate  
Information

Educate and Prevent

Expand Treatment  
Capacity

Save Lives

Reduce Drug-  
Related Crimes

Build Community  
Support

